09/400,568

ABSTRACT

Olefin Polymerization Process
With Alkyl-substituted Metallocenes

The invention comprises an olefin polymerization process comprising contacting ethylene alone or with one or more olefinically unsaturated comonomers with a Group 3-6 metallocene catalyst compound comprising one π-bonded ring having a C_3 or greater hydrocarbyl, hydrocarbylsilyl or hydrocarbylgermyl substituent said substituent bonded to the ring through a primary carbon atom; and, where the compound contains two π-bonded rings, the total number of substituents on the rings is equal to a number from 3 to 10, said rings being asymmetrically substituted where the number of substituents is 3 or 4. The invention process is particularly suitable for preparing ethylene copolymers having an MIR less than about 35, while retaining narrow CD even at high comonomer incorporation rates, and with certain embodiments providing ethylene copolymers having improved melt strength with the low MIR.